

Managing Hazardous Waste from Dry Cleaning

Dry cleaning is required of many clothes that we wear. Most dry cleaners use solvents in their cleaning process. These solvents dissolve grease and list stains out of cloth that cannot be washed in water and detergent. Many of the solvent solutions yield wastes that may be hazardous and are regulated under the state's hazardous waste rules.

What is a hazardous waste?

A hazardous waste is a material that is spent or no longer useful in its original form and exhibits a characteristic of (or listed as a) hazardous waste. The most commonly used solvents in the dry Cleaning industry are:

Perchloroethylene (aka tetrachloroethylene or "perc")
Petroleum solvents
Trichloroethane

During the cleaning, extraction and drying process, Dry cleaners may produce one or more of the following wastes:

Filters and filter media
Separator water
Spent solvents and solvent containing rags (from spill cleanup)
Still residues and muck
Spent carbon and cartridges from carbon adsorbers

Most dry cleaners generate hazardous waste. Hazardous wastes are classified into two types: listed and characteristic.

Listed hazardous wastes are listed by name or process in the Hawaii Administrative Rules (HRS) Chapter 11-261. For example, perc used in dry cleaning is a listed hazardous waste with a hazardous waste code of F002 when spent. Perc has The waste code of U210 as a pure commercial Chemical product if discarded prior to use. Spill Residues from the cleanup of perc product spills are also considered to be U210 hazardous waste.

Any other waste coming in contact with a listed waste also becomes a listed waste by mixture of the "mixture rule". This includes wastes such as filters, filter media, still residue (sludge), and filter powder (muck) containing perc.

Characteristic hazardous waste exhibits one or more of the four hazardous characteristics (ignitability), reactivity, corrosivity, and toxicity.) For example, a waste solvent exhibits the characteristic of ignitability if it has a flashpoint below 140 degrees F. Perc, for example, is one of the 39 hazardous constituents. Any waste which contains 0.7 parts per million or more of perc is considered to be a D039 toxic hazardous waste.

Who is a generator?

Every dry cleaning facility that produces hazardous waste is considered a generator.

DETERMINING YOUR HAZARDOUS WASTE CATEGORY

Evaluate the facility's waste

Consider all waste generated at the facility
Consider all objects that come in contact with perc (e.g. maintenance residue and spill clean up material)

Determine the facility's generator status

There are three categories of hazardous waste generators. These categories are determined by the amount of hazardous waste that is generated by a business each calendar month. The hazardous waste requirements differ from these three sizes of generators.

Conditionally Exempt Small Quantity Generator (CESQG)

Generates less than 100 kg (220 lbs or 25 gallons) of hazardous waste in a calendar month.

CESQGs are required to:

- ~Evaluate their waste;
- ~Ensure delivery of hazardous wastes to an off-site permitted hazardous waste facility; and
- ~Limited quantities accumulated on-site to less than 1000 kg (2200 lbs).

Small Quantity Generators (SQGs)

Generates between 100 and 1000 kg (220 to 2200 lbs or 25 to 300 gallons) of hazardous waste per month.

SQGs are required to"

Comply with hazardous waste accumulation requirements.

Hazardous waste must be store in containers that are:

- ~Marked with the date upon which accumulation begins.
- ~Labeled or marked with the words "hazardous waste".
- ~In good condition and made of or lined with material compatible with the waste.
- ~Closed during storage except when waste is being added or removed.
- ~Inspected weekly for evidence of leaks or deterioration, and the inspections documented in a log.
- ~Waste may be stored for up to 270 days.
- ~The total accumulated waste must not exceed 6000 kg (13,200 lbs).
- ~Use a hazardous waste manifest when sending and transporting waste off-site.

Large Quantity Generators (LQGs)

Generates more than 1000 kg (more than 2200 lbs) or hazardous waste per month.

LQGs are required to:

- ~Comply with all hazardous waste requirements for SQGs.
- ~Waste may only be stored for up to 90 days.
- ~Contact the Department of Health Hazardous Waste Section (586-4226) for further information.

TRANSPORATION AND DISPOSAL OF HAZARDOUS WASTE

Manifests

A hazardous waste manifest is a shipping form, completed by the generator, that accompanies each shipment of hazardous waste when it is transported off-site. Manifests are required of all SQGs and LQGs sending waste off-site.

Land Disposal Restrictions (LDR)

A Land Disposal Restriction (LDR) form must accompany hazardous waste to the disposal facility. An LDR form must be completed even if the waste is to be recycled.

Liability

Although a waste disposal or recycling firm is often hired to manage the hazardous waste generated at a dry cleaning facility, liability for the waste does not end when it leaves the cleaner's site. It is still the cleaner's responsibility to ensure that the hazardous Waste is properly managed.

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Identification Numbers

U.S. EPA ID numbers are required by large and small quantity generators (SQGs and LQGs. They are voluntary for conditionally exempt small quantity Generators (CESQGs).

EMPLOYEE TRAINING PROGRAM

Dry cleaners must ensure that their employees are Familiar with proper waste handling and emergency procedures relevant to their job duties.

Emergency Procedures

An internal communication alarm system must be established. A telephone to obtain emergency assistance, fire extinguishers, and spill control and decontamination equipment must be easily accessible. Inform the police, fire department, local hospital, and emergency response agency of the facility layout and types of hazardous waste handled at the site. Designate an Emergency Coordinator who can be contacted 24 hours a day, and post emergency information next to the facility phone.